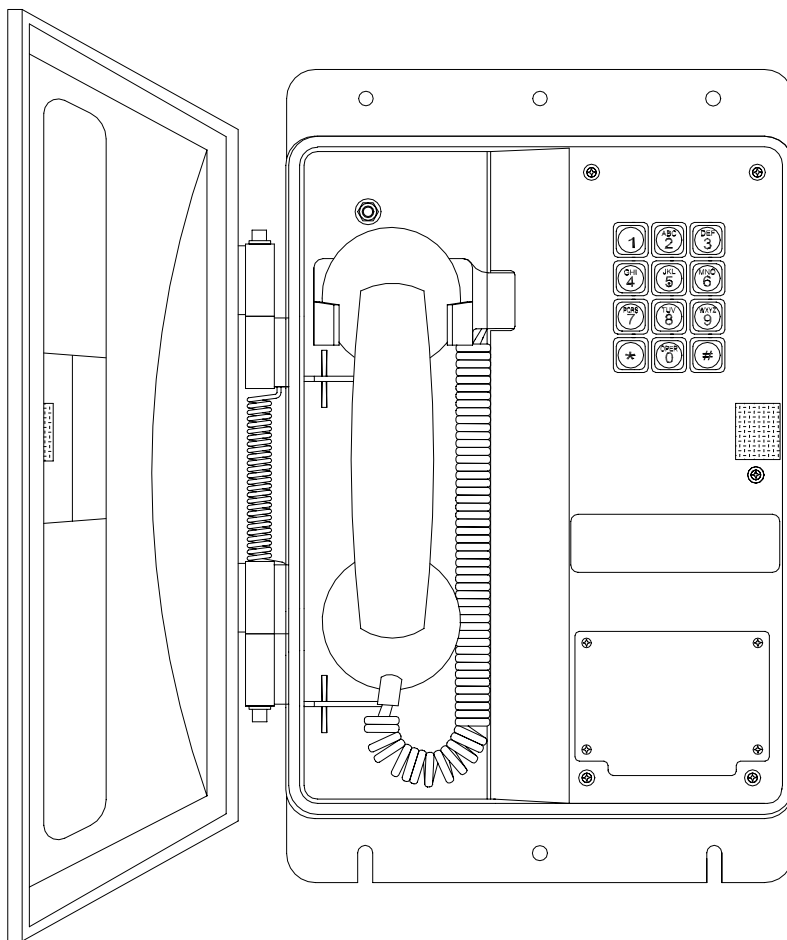


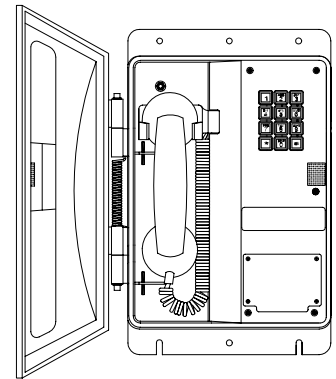
Weather Resistant Industrial Telephones

WRT-A Series

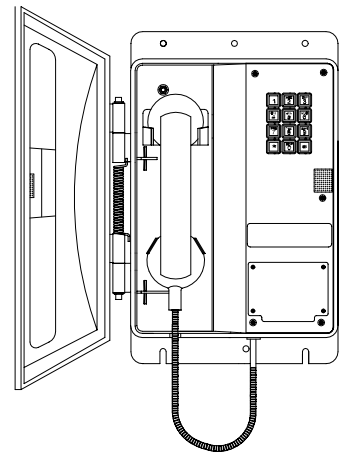
Installation & Operation



WRT-10-A



WRT-30-A



WRT-40-A

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Package Contents

- (1) WRT-A Telephone
- (1) Installation & Operation Manual

WRT-A Models and Options

| Part No. | Model | Description |
|----------|----------|---|
| P6050 | WRT-10-A | Weather Resistant Telephone with Teleseal Keypad & 6' Heavy Duty Curly Cord |
| P6052 | WRT-30-A | Weather Resistant Telephone with Metal Keypad & Heavy Duty Curly Cord |
| P6053 | WRT-40-A | Weather Resistant Telephone with Metal Keypad, Armored Handset Cord & Handset Retainer Clip |

Options Available

| | | |
|----------------------------|-------|-------------------------------|
| 20' Heavy Duty Curly Cord | (20C) | (Not available with WRT-40-A) |
| Noise Canceling Microphone | (NC) | |
| Grey Enclosure | (GR) | |

Overview

WRT-A Weather Resistant Telephone Series

WRT-A telephones are designed to provide safe, reliable communication in areas prone to high humidity, chemical vapors, dust and physical abuse. Several variations and options are available to suit the end user's requirements.

Standard Features On All Models

Enclosure

- Weather tight, rugged Valox® & steel
- Spring loaded hinged door

Faceplate

- 16 Gauge steel – satin coat primed and powder coated, with wiring access to surge arrestor

Mounting Plate

- Stainless steel back plate for ease of mounting

Encapsulated Circuitry

- Circuit boards are resistant to corrosive agents (e.g. H₂S, SO₂, and NH₃), and environments with high humidity

Surge Arrestor

- Protects the user in the event of a high voltage spike on the telephone line

Fuse

- Prevents damage to the electronic circuits in the event of a high voltage spike on the telephone line

Magnetic Reed Hook Switch

- No moving parts

Tone (DTMF) Operation

- Factory set to tone (DTMF) dialing
- Pulse dialing can be ordered or configured in the field

6' Heavy Duty Handset Cord (Not Available With WRT-A-40)

- Withstands severe use

Hearing-Aid Compatible (HAC) Receiver

- Compatible with inductively coupled hearing-aid devices

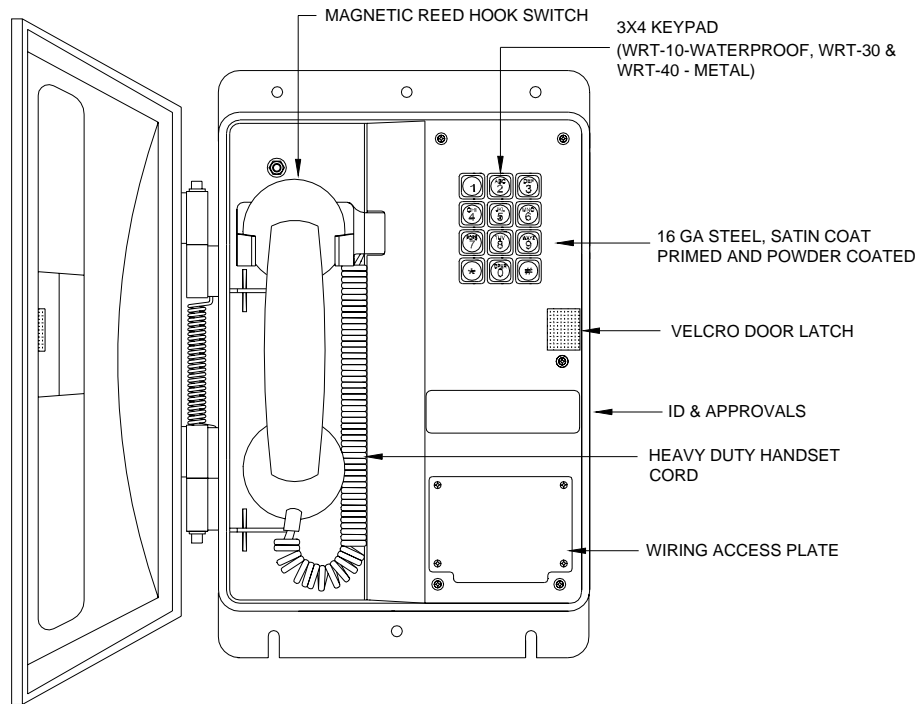


Figure 1 - Features - Typical - Standard Models

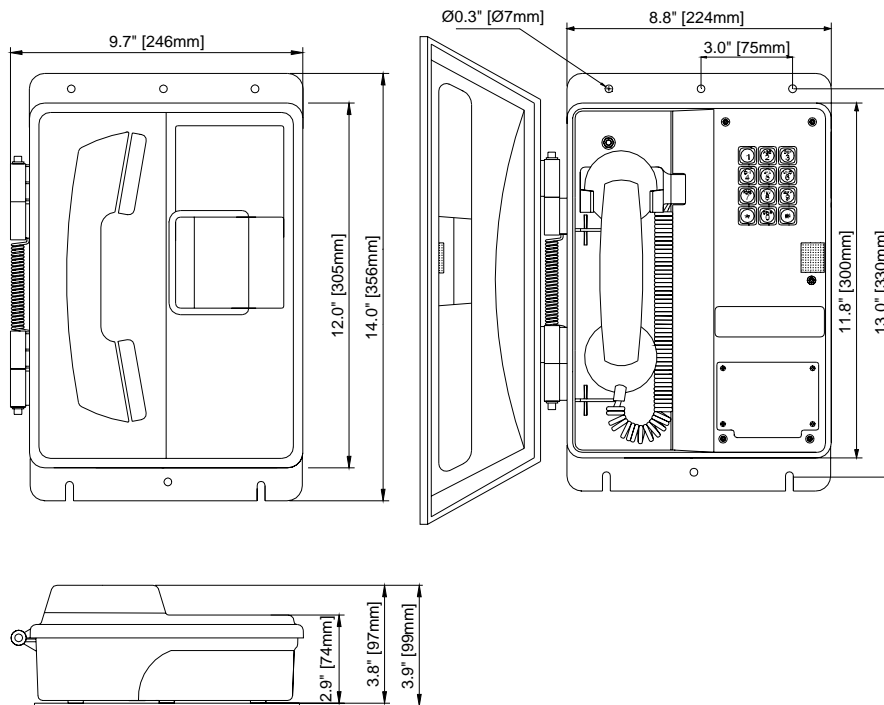


Figure 2 - Overall Dimensions

Installing the WRT-A

- **WRT-A telephones shall be installed by qualified service personnel.**
- The WRT-A is set to tone dialing when shipped. If pulse dialing is required see the section on Setting Dialing Mode.
- Follow all appropriate electrical codes and use only approved electrical fittings for the installation.
- Choose a wall location that is free of obstructions and permits space for wiring.
- Ensure mounting can support 6.5 lbs (2.95 kg) plus any additional, foreseeable load.
- Ensure that none of the electrical connection circuits are live.

See: Figure 3 - Setting Dialing Mode & Installation

See: Figure 2 - Overall Dimensions

Mounting

- Use the template or the unit itself to locate and drill holes for mounting screws.
- Secure the unit to the wall.

Hard Wiring the WRT-A to the Telephone System

- Remove the wiring access cover plate.
- Install a suitable conduit hub or cable gland in the cable entrance hole.
- Bring cable into the enclosure through the cable entrance and attach individual wires from the exchange – Tip/Ring/Ground – to the surge arrester (Tip & Ring are not polarity sensitive).

WARNING

Protective earthing terminal of the phone shall be properly hardwired to a protective earth system.

- Replace the wiring access cover plate.

Final Check

- Check the set visually for loose screws and trapped wires. Check that the handset hangs freely in the cradle and that the handset cord is not trapped by the door.
- Check that the faceplate is snug to its gasket, paying particular attention to the area around the cradle. Check that the door closes flush to the housing.
- Test the unit by calling to and from another unit on the exchange.

Operation

- Once your Model WRT-A Telephone has been properly installed and energized, operation is identical to most other single line telephones.

WARNING

Due to magnetic fields, it is possible that dangerous objects may get trapped within the earcap region of this device.

Setting Dialing Mode

The WRT-A is shipped from the factory set for DTMF (Tone) dialing mode. If loop disconnect (Pulse) dialing is required proceed as follows.

- Loosen the five captive screws in the faceplate and swing the faceplate to the left. If the set is on a vertical surface the faceplate will stay open like a book in this position. Take care not to disturb the internal wiring.
- Change the position of the Tone/Pulse jumper on the circuit board to Pulse, as indicated on the label.
- The set will now be in pulse dialing mode, it can be returned to tone mode by changing the position of the jumper back to the Tone position.
- Carefully replace the front plate and install all five screws. Do not over tighten the cover screws, there is a flexible gasket between the cover and the body. Excessive tightening of the screws deforms the gasket and reduces the weather resistance of the set.

See: Figure 3 - Setting Dialing Mode & Installation

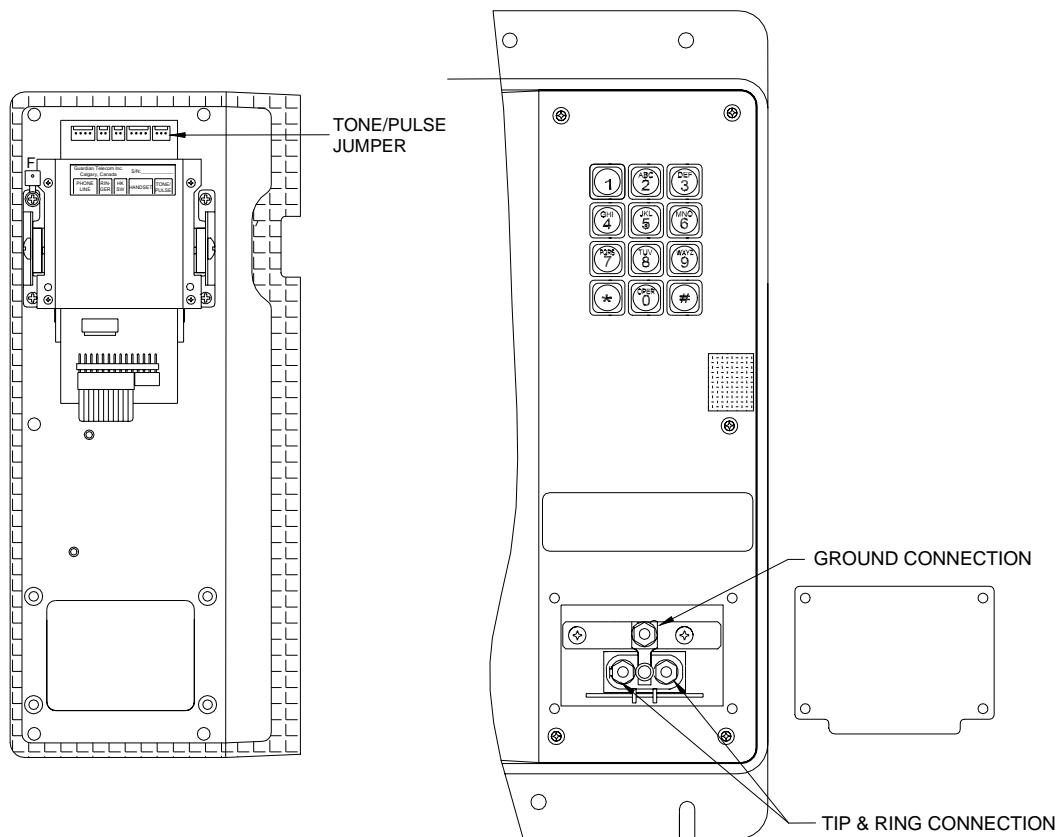


Figure 3 - Setting Dialing Mode & Installation

Field Repairs & Adjustments

Field repairs may only be carried out by qualified technicians using OEM parts. Substitution of parts voids warranty and may pose a hazard to users of the equipment.

- Disconnect the telephone from Tip and Ring power supplied by the PABX or central office before attempting repairs.
- Loosen the five captive screws in the faceplate and swing the faceplate to the left. If the set is on a vertical surface the faceplate will stay open like a book in this position. Take care not to disturb the internal wiring.
- Perform the necessary repairs or adjustments.
- Carefully replace the front plate and install all five screws. Do not over tighten the cover screws, there is a flexible gasket between the cover and the body. Excessive tightening of the screws deforms the gasket and reduces the weather resistance of the set.

Fuse Replacement

- Remove the old fuse by pushing in the end cap of the fuse holder and turning counterclockwise to open. Insert a new 0.25 amp, 250Volt, 3AG fast blow fuse and close the fuse holder.

WARNING!

- Replace only with a 0.25 amp 250V 3AG fast blow fuse. Failure to do so will void the warranty.
- If, on reconnecting power, the fuse fails, check the telephone system wiring. The fuse protects the Tip and Ring line from the telephone system. It is usually powered at 48 volts DC and must not be connected to 120 volts AC.

See: Replacement Parts

See: Figure 4 - Fuse Replacement

Note: Ensure that connections are secure before replacing faceplate.

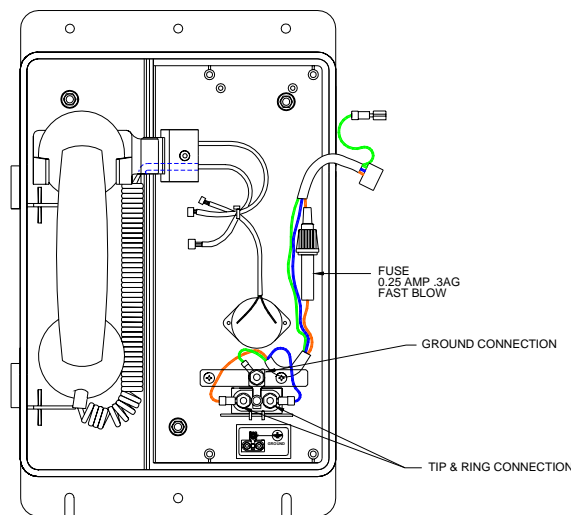


Figure 4 - Fuse Replacement

| Engineering Specifications | |
|-----------------------------------|--|
| *ELECTRICAL PERFORMANCE | |
| AUDIBLE RANGE FREQUENCY RESPONSE | 300 – 3400 Hz |
| DIALING METHOD | DTMF OR 33/66 PULSE AT 10 PPS |
| SEND LOUDNESS RATING (SLR) dB | SHORT 8 dB +/- 4 dB |
| RECEIVE LOUDNESS RATING (RLR) dB | SHORT -4 dB +/- 4 dB |
| SIDE TONE MASKING RATING (STMR) | >11 dB |
| RINGER OUTPUT | 75 dB MAXIMUM |
| RINGER EQUIVALENCE | 0.5 |
| SET IMPEDANCE | 600 OHMS NOMINAL |
| MAXIMUM LOOP | 15,000 FT (4,600 M) OF 22 AWG COPPER |
| ELECTRICAL | |
| RINGER SENSITIVITY | 40 – 100 V, 16 – 25 Hz |
| LINE VOLTAGE | 24 – 56 VDC |
| LOOP CURRENT | 20 - 120 mA |
| CONNECTION METHOD | SURGE ARRESTOR / TERMINAL BLOCK |
| FUSE | ¼ AMP 250 VOLT 3AG FAST BLOW |
| ENVIRONMENTAL | |
| WEATHERPROOF | ENCLOSURE NEMA 3R |
| TEMPERATURE | -40° TO +60° C (-40° TO +140° F) |
| HUMIDITY | 0 TO 95% RH |
| DUSTPROOF | FULLY GASKETED FACEPLATE & WEATHERPROOF KEYPAD |
| CORROSION RESISTANT | MIL-STD-810E SALT FOG |
| MECHANICAL | |
| HOOK SWITCH (CRADLE SWITCH) LIFE | >1 000 000 OPERATIONS |
| BODY CONSTRUCTION | GE VALOX 357 [®] ENGINEERING POLYMER |
| DIMENSIONS | 12 X 9.6 X 3.9 INCHES (305 X 245 X 99 MM) |
| NET WEIGHT | 6.5 LBS (2.95 KG) |
| HANDSET MATERIAL | HIGH IMPACT ABS |
| MICROPHONE | NOISE REDUCING ELECTRET |
| OPTIONAL MICROPHONE | NOISE CANCELING DYNAMIC |
| RECEIVER | HEARING AID COMPATIBLE (HAC) |
| STANDARD MOUNTING | VERTICAL WALL |
| WIRING ACCESS | 7/8" DIAM. OPENING FOR OWNER SUPPLIED FITTING |

| COMPLIANCE | |
|-----------------------------|-------------------|
| ACA | N14510 |
| DOC | 1012 6721 A |
| FCC | HQHCAN-22517-TE-E |
| WEATHERPROOF | ENCLOSURE NEMA 3R |
| ENVIRONMENTAL SURVIVABILITY | MIL-STD-810E |

Replacement Parts

| Part No. | Description |
|-----------------|---|
| P005765 | Faceplate WRT-A (All Models) |
| P003022 | Handset Shell C/W 22" Armored Cord |
| P002294 | Handset Shell Only – For WRT-10-A & WRT-30-A |
| P002554 | Cord – Handset 6' |
| P005961 | Handset Cradle C/W Reed Switch |
| P004371 | Handset Retainer – WRT-40-A Only |
| P000028 | Microphone Cartridge – Noise Reducing |
| P004538 | Microphone Cartridge – Noise Canceling |
| P002080 | Receiver Cartridge |
| P006307 | Handset Assembly Complete – C/W 6' Curly Cord For WRT-10-A & WRT-30-A |
| P004259 | Handset Assembly Complete – C/W 22" Armored Cord For WRT-40-A |
| P006291 | Keypad Assembly – Plastic C/W Telephone Circuit Board For WRT-10-A |
| P006281 | Telephone Circuit Board |
| P005576 | Keypad – Plastic For WRT-10-A |
| P000907 | Keypad Cover – Teleseal For WRT-10-A |
| P006295 | Keypad – Metal For WRT-30-A & WRT-40-A |
| P002782 | Ringer – Floyd Bell BR-3-39 |
| P005917 | Reed Switch |
| P002992 | Surge Arrestor – TII 126L1 |
| P002991 | Fuse – Glass 0.25 Amp 250V |
| P000126 | Housing |
| P003045 | Backplate |
| P002988 | Door C/W Velcro Latch |
| P001706 | Hinge Pin – 8.390 Nylon |
| P001488 | Door Spring |
| P002995 | Hinge Pin Retaining Ring |

Government Certification

Attached to the telephone is a label for the Australian Communications Authority. This identifies equipment certifications indicating the WRT-A series telephones meet certain telecommunications network protective, operational and safety requirements. This agency does not guarantee the equipment will operate to the user's satisfaction.

Before installing this telephone equipment, users should ensure it is permissible to connect the equipment to facilities of the local telecommunications company.

Equipment must be installed using acceptable connection methods. In some cases, the telephone users inside wiring, associated with a single line service, may be extended by a certified connector assembly (telephone extension cord). The customer should be aware that in some situations compliance with the above conditions may not prevent degradation of service.

Repairs to certified equipment should be made by a supplier designated authorized maintenance facility.

For their own protection users should ensure the electrical ground connections of the power utility, telephone lines and internal metallic water pipe systems, if present, are connected. This precaution may be particularly important in rural areas.

CAUTION: Users should not attempt to make ground connections, but should contact the appropriate electrical inspection authority or electrician.

Notification to Telephone Company

Upon request, the customer must notify the telephone company of the particular line to which the connection will be made and provide the Australian Communications Authority registration number. The local telephone company may request disconnection of the telephone where alterations or malfunctions affect the telephone's performance.

ACA Rules and Ringer Equivalence Number

This equipment complies with the regulation AS/ACIF S002:2001 Australian Standard Analogue internetworking and non-interference requirements for customer equipment for connection to public switched telephone networks. On the side of this equipment is a label that contains, among other information, the ACA registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed three. To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

Service changes and Limitations

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

This equipment can not be used on public coin telephone service as provided by your telephone company. Connection to party line service is subject to state tariffs (contact the state public utility commission, public service commission or corporate commission for information.)

Warranty

Guardian Telecom warrants your product to be free of defects in material and workmanship for a period of one year. Guardian Telecom will repair or replace any defective unit that is under warranty free of charge.

This warranty is null and void if any non-authorized modifications have been made to this product, or if it has been subjected to misuse, neglect, or accident. This warranty covers bench repairs only; such repairs must be made at Guardian Telecom or an authorized service depot. Guardian Telecom is not responsible for costs incurred for on-site service calls, freight, or brokerage.

A return authorization must be obtained prior to warranty claims or repairs.

Disclaimer

The products covered by this manual are designed for use in Industrial Environments and/or Hazardous Locations. Due to the range of possible applications for these instruments the manufacturer will not be responsible for damages or losses of any kind suffered as a result of the use of this product, including consequential damages.

Warning

This device may be opened and reassembled by qualified personnel only, for the purposes of installing the product, making adjustments and replacing components, following the instructions in the product manual.

High voltages may be present in this product when connected to telephone wiring.

Service Telephone Number

1-800-363-8010 – North America

Guardian Telecom provides a customer service telephone number which is toll-free within North America. The Authorized Dealer/Service Depot is listed below for your area. If you need assistance when installing or operating this product, please call the toll-free telephone number or the Authorized Service Depot between regular business hours (8:00AM-5:00PM). If you are calling outside regular business hours, please leave a detailed message, and a member of Guardian Telecom's Service Department will return your call as soon as possible. If your product requires service, Guardian personnel will supply you with an RMA (return materials authorization) number over the telephone or through our web site product return page at <http://www.guardiantelecom.com>. This number must be included with your return address and the name of the person to contact.

**Qmax Group Pty Ltd
21 Jubaea Crt
Canning Vale
Western Australia 6155
Phone (08) 9455-4671
Fax (08) 6210-1749
Email : info@qmax.net.au
*(Click to open message box)***

Feedback

Guardian Telecom continually strives to make reliable, durable, and easy to use products. If you, as an installer or user of our equipment, have any suggestions for improvements to this or any of our products or documents, including this manual, we would appreciate hearing from you.

| Guardian Product Return |
|---|
| Guardian products have been quality tested and are in full working order when shipped from the factory, given the rugged nature of these products shipping is not expected to damage a unit. In the unlikely event of a malfunction, Guardian follows the three step procedure below. |
| <i>Step I - On-Site Correction</i> |
| <ul style="list-style-type: none">• The most common source of difficulties with a new product is improper installation in one of two ways: incorrect wiring connections or connection to an incorrect power source. |
| <ul style="list-style-type: none">• Product wiring needs to be properly connected to the on-site wiring. Correct wiring instructions are shown in the user manual included with the product. |
| <ul style="list-style-type: none">• Connecting a telephone to a standard power source, rather than tip & ring, will blow the telephone's internal, user-replaceable fuse. In the event of fuse burn-out, disconnect the telephone from the power source, replace the fuse, and reconnect following the wiring diagrams provided with the product. |
| <i>Step II - Return Materials Authorization (RMA)</i> |
| <ul style="list-style-type: none">• When a product has been installed following user manual instructions, and the unit fails to operate, the user must contact the Service Number indicated on the previous page, to obtain authorization to return the product. |
| <ul style="list-style-type: none">• After providing information on the product, the owner and the nature of the problem, Guardian will issue a RMA number, to be shown on documentation returned with the product. |
| <ul style="list-style-type: none">• In addition to the RMA number, shipping documents should include name, address and telephone number of the owner along with contact information for the person responsible for the repair and/or the user who identified the malfunction. |
| <i>Step III - Factory Authorized Service</i> |
| <ul style="list-style-type: none">• Once received, each product is carefully inspected and tested. If the product is under warranty, repairs are completed and the product returned to the owner, generally within five working days of receipt. |
| <ul style="list-style-type: none">• A product that has been subjected to misuse, neglect or accident or is beyond the warranty period will be evaluated. The service department will provide the owner's representative with a repair cost estimate. Once approved, repairs are completed and the product returned, generally within five working days. |



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Industrial Communications Worldwide